



**Smart  
Internz**

## **Project Documentation**

### **APSCHE SMARTINTERNZ INTERNSHIP PROJECT**

### **FRONTEND DEVELOPMENT**

## **Project Title: WEATHER APP**

### **Team Members**

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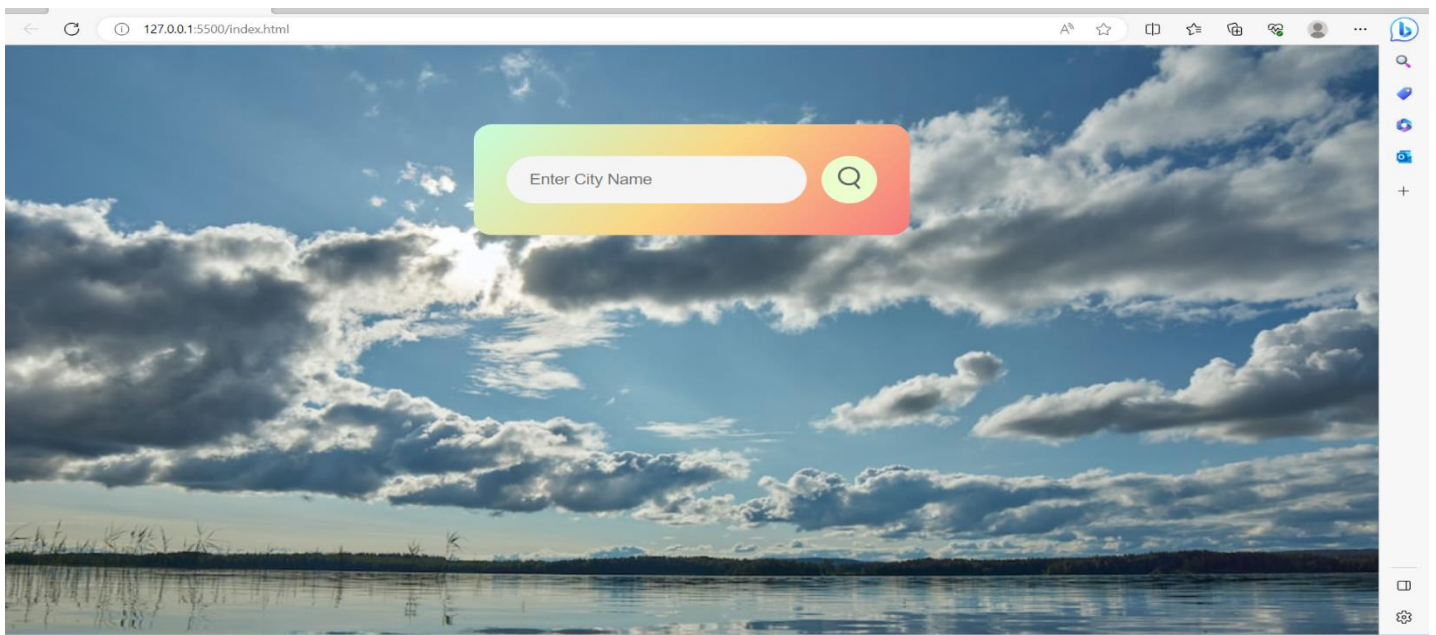
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## INTRODUCTION

### Weather App:

**Weather app** is a mobile web application that provides the users with real-time weather information and forecasts. Through intuitive user interface design the app delivers or shows the accurate weather data, including current conditions like temperature, humidity, wind speed, and precipitation forecasts. When a user wants to know the weather for any specific city or specific place, they can get the data by using the weather app.



### Purpose:

The Weather app is a user-friendly web application that facilitates the weather of a specific city or country. Weather is something everybody deals with, and the accurate data about it like what is coming can help users to

make informed decisions. The weather app also uses to find when will the weather changes and it provides alerts. Here the weather app provides a particular city or the country weather for the users. If the user does not provide a correct city or country name the app shows Invalid name.

## **LITERATURE SURVEY**

### **Existing problem:**

Weather forecasts are always a game of prediction and probabilities, but these apps seem to fail more often than they should. Weather apps are not all the same. At best they perform about as well as meteorologists. Sometimes the weather app might show the wrong data due to the issue of the network, might not get the correct information of weather.

Weather Apps might be less reliable for another reason too. When it comes to predicting server weather such as snow, small changes in atmospheric moisture the type of change an experienced forecaster might notice can cause huge variances in precipitation outcomes.

Weather apps are sometimes programmed to take one computer model or a blend of computer model data. However, these computer models go out to 10 or more days and new computer models come out every few hours. The weather changes very rapidly, and even the most reliable computer models are prone to error and inconsistencies.

### **Proposed solution:**

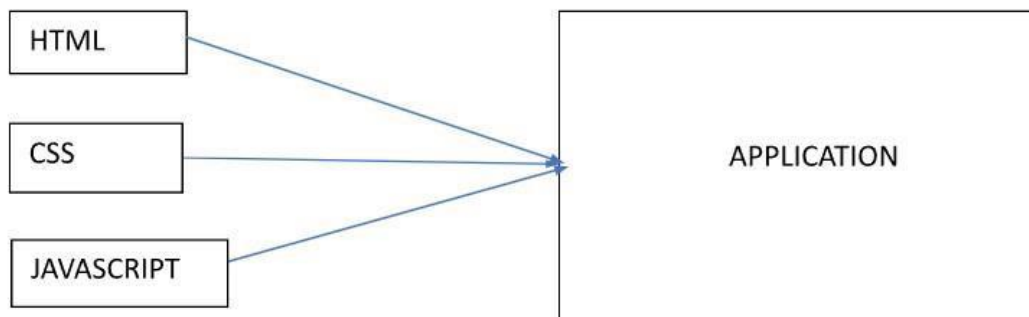
- The proposed solution for building the Weather App web application involves using HTML, CSS, and JavaScript to create a dynamic and interactive user interface.

- HTML will be used to structure the web pages, CSS for styling and layout design, and JavaScript for implementing various functionalities and user interactions.
- The front-end will be designed with a responsive approach, ensuring optimal user experience across different devices and screen sizes.

## THEORITICAL ANALYSIS

### Block diagram:

Diagrammatic overview of the project.



### Hardware / Software:

A code editor (i.e Visual Studio Code)

- A web browser
- An internet connection
- HTML, CSS, and JavaScript knowledge

## Software Folder Structure:

1. Index.html
2. Style.css
3. Script.js

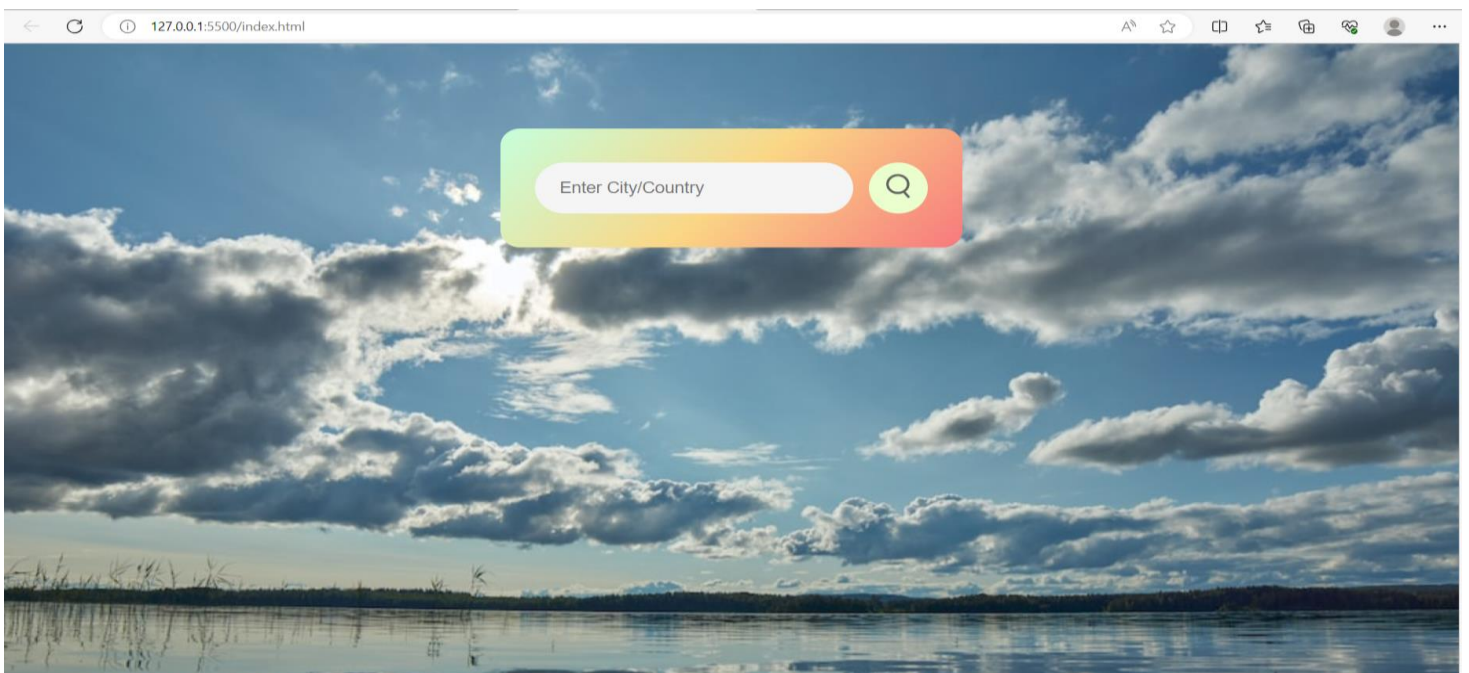
**index.html:** The main HTML file that contains the structure of the webpage.

**styles.css:** The CSS file that defines the styles for the user interface.

**script.js:** The JavaScript file that handles data and all functions that are used in projects and updates the UI.

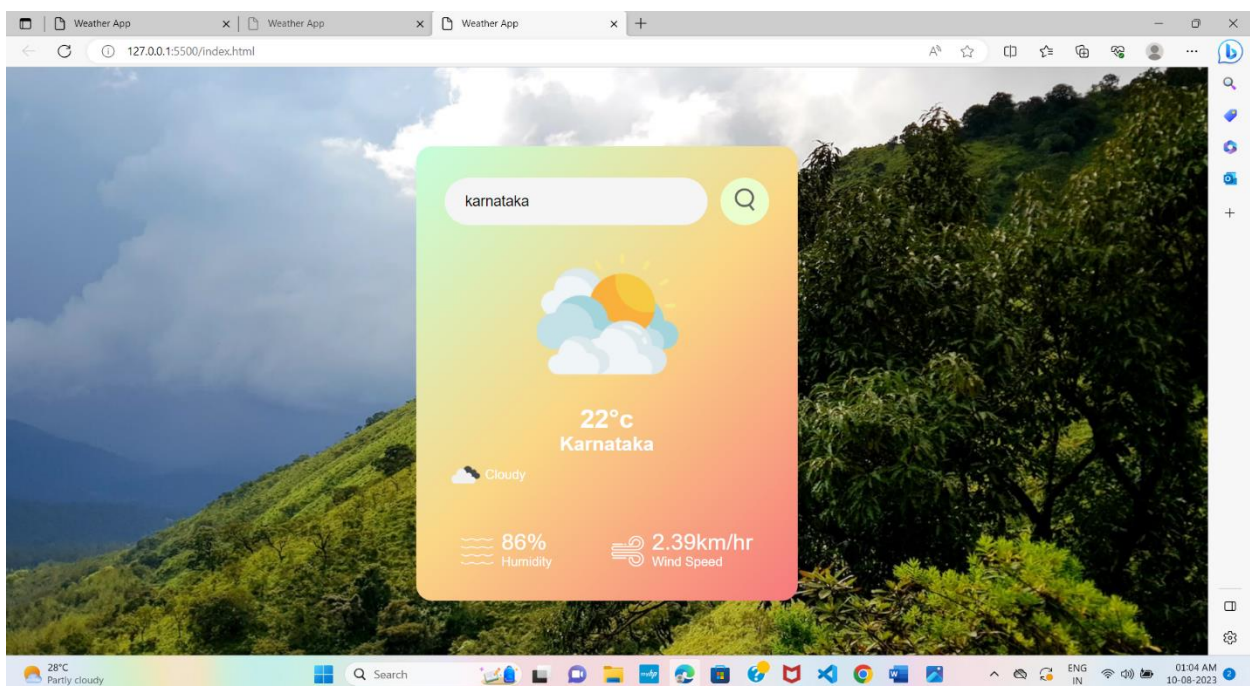
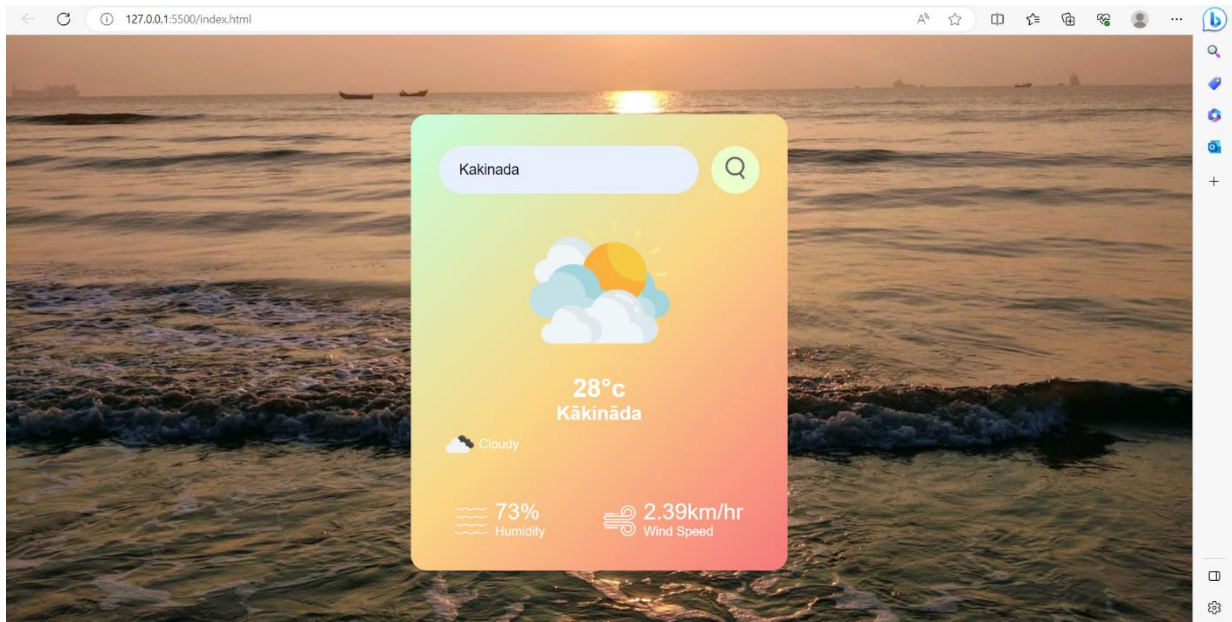
## Project Final Output

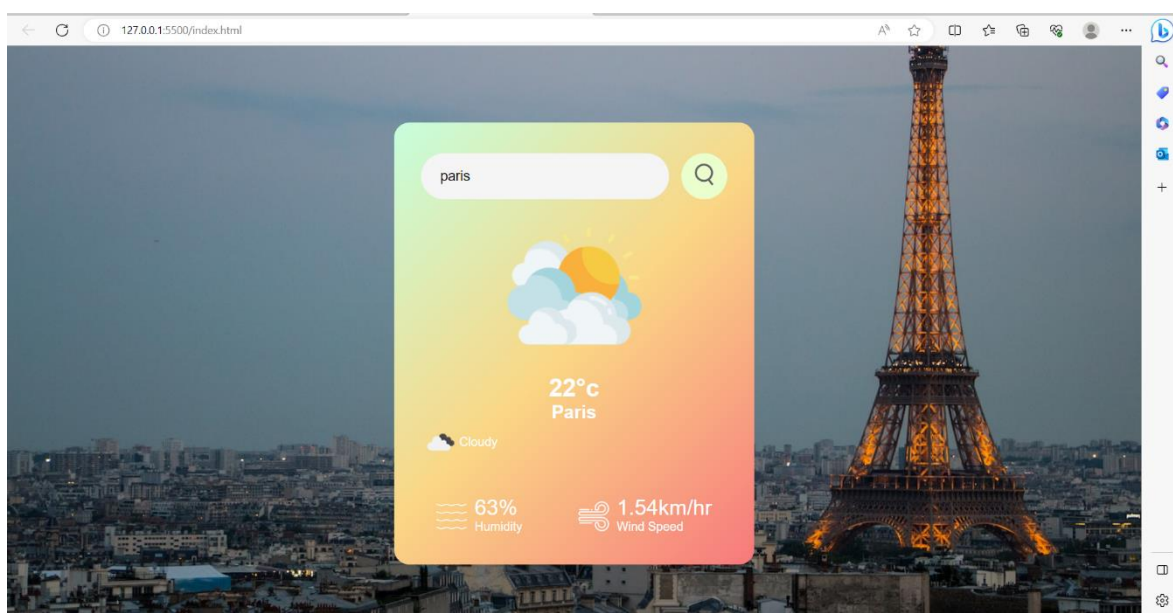
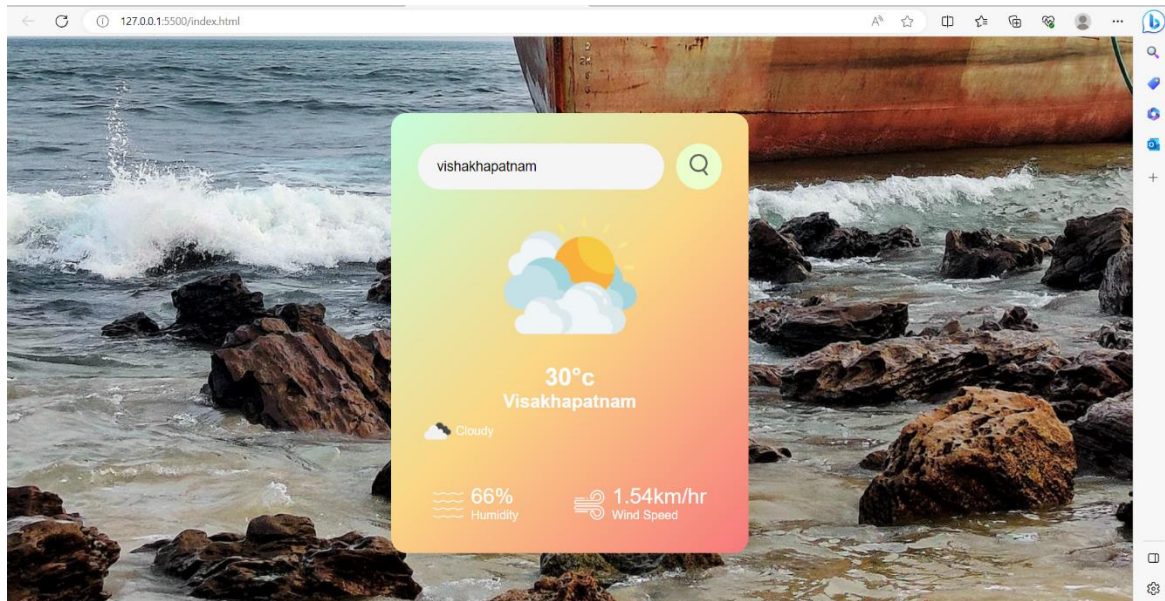
### Home:



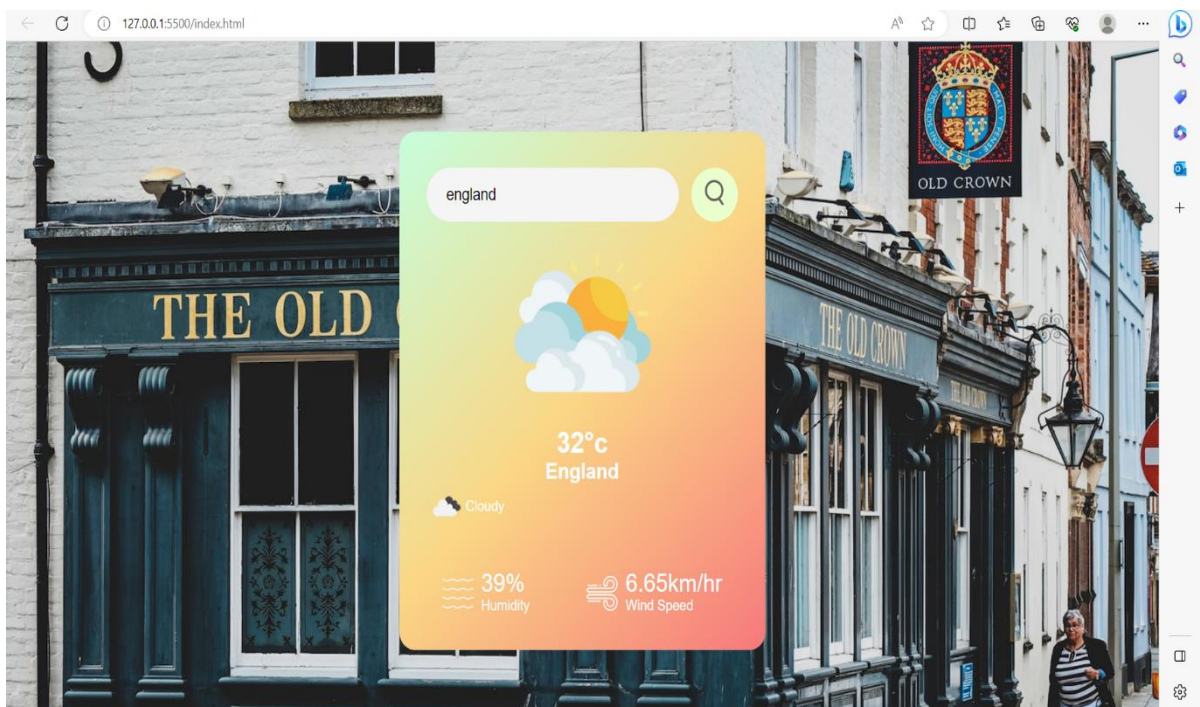
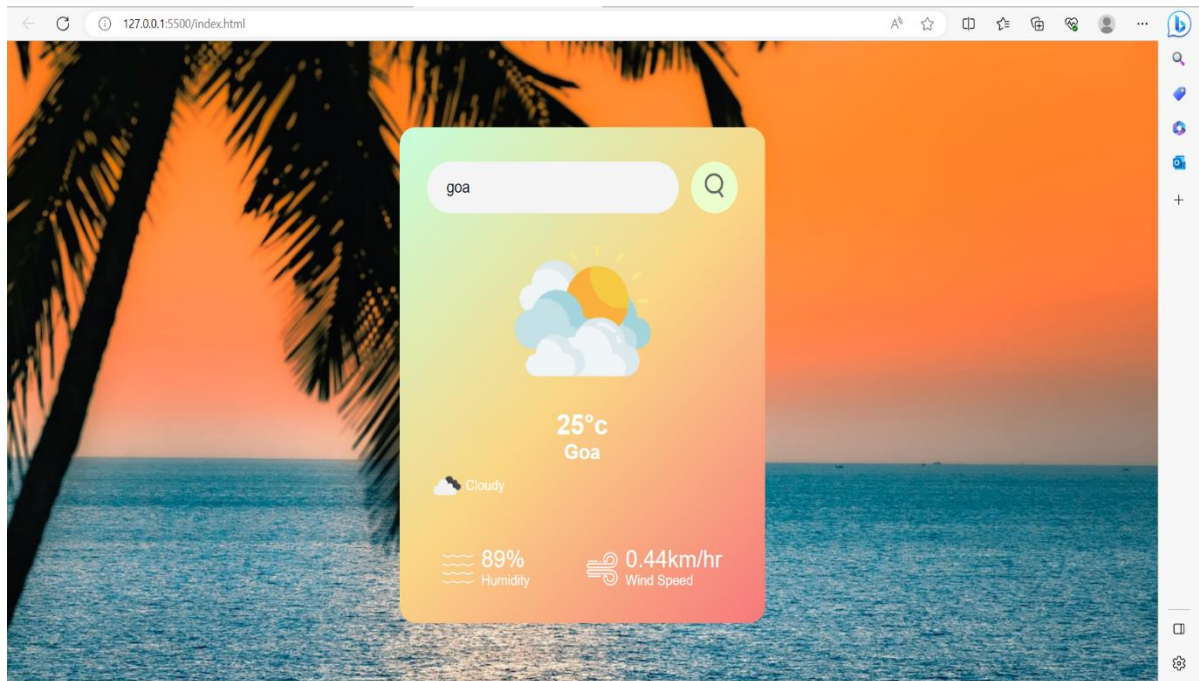


**After entering city/country name:**











## **ADVANTAGES & DISADVANTAGES**

### **Advantages of the Proposed Solution:**

The proposed solution, which involves using HTML, CSS, and JavaScript for building the Weather App web application, offers several significant advantages.

- **Instant Information Availability:** Weather app can provide real-time weather updates, so as always know what to expect. This is especially helpful if you're planning outdoor activities or travelling.
- **Improved Weather Forecast:** Weather apps use advanced algorithms to provide more accurate weather forecasts than traditional methods. This can help you make better decisions about your day-to-day activities.
- **Easy Flow Information:** Weather apps are designed to be easy to use and navigate. You can quickly find the information you need without having to scroll through pages of text.
- **Overall, weather apps are a valuable tool that can help you stay informed about the weather and make better decisions about your day-to-day activities.**

### **Disadvantages of the Proposed Solution:**

While the proposed solution has several advantages, it also comes with certain disadvantages that need consideration.

- **Accuracy:** Weather forecasts are not always accurate, and this can be especially true for short-term forecasts. This is because the

atmosphere is a chaotic system, and it is difficult to predict how it will behave.

- **Battery drain:** Weather apps can drain your battery, especially if you have them set to update frequently. This can be a problem if you are on a long road trip or if you have a limited battery life.
- **Data usage:** Weather apps can use a lot of data, especially if you are using them to get live radar or other high-bandwidth features. This can be a problem if you have a limited data plan.
- **Complexity:** Some weather apps can be quite complex, with a lot of features and settings. This can be overwhelming for some users.
- **Overall,** weather apps are a great tool for staying informed about the weather, but it is important to be aware of their limitations. If you are concerned about accuracy, battery drain, data usage, privacy, or complexity, you may want to consider using a different weather source, such as a news website or a TV weather report.

## **APPLICATIONS**

The proposed solution of building an Weather App web application using HTML, CSS, and JavaScript can be applied in multiple areas.

- **Current weather conditions:** This includes the temperature, humidity, wind speed, precipitation, and visibility. This information can be helpful for planning your day and staying safe
- **Making informed decisions:** Weather apps can also help you make informed decisions about things like travel, business, and personal finances. For example, you can use a weather app to decide whether to book a flight or drive to your destination, or whether to invest in a raincoat or snow boots.

## **CONCLUSION**

Now a day's there is a big demand and big need of different types of applications. People wants application for every specific task from work to entertainment. So, we have developed the application "Weather WebApp" which works easy on any given web browser.

The applications has been tested and found to be working as per the given criteria. It can be safely concluded that the application works properly and also meet all the requirements of the user. The application gives the user maximum flexibility in the types of touch and other movements.

In conclusion, from the Weather App developed by using the HTML, CSS, and Javascript it gives the information about the present weather conditions showing temperature, wind speed, humidity. It also gives the entered location related images as background images on the page.

## **FUTURE SCOPE**

- **User Authentication:** Incorporate user authentication to provide a personalized experience. Users could log in to app and can get the information they want.
- **Multimedia Elements:** Integrate multimedia elements such as forecasting the weather for providing the users with upcoming days weather. And also can provide the past days forecast report.
- **Client-Side Frameworks:** Consider using client-side frameworks like React, Vue.js, or Angular to create a more dynamic and interactive frontend.
- **Mobile App Extension:** Consider creating a mobile app version of your portfolio to tap into a different audience and provide a seamless mobile experience.
- **Weather or Application Programming Interfaces:** These are services that provide real-time access to weather data and forecast. These APIs enable developers to build applications for their users that can access the latest weather information from a variety of sources.

**THANKYOU!**